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ABSTRACT

This study introduces a novel methodology for examining affective experiences in the classroom. The general procedure is to make auditory and visual recordings of a particular child during a normal classroom period. That child is then immediately taken from the class and placed in a private room where the recordings are replayed. The student is instructed to relive the situation, stop the tape anytime that a feeling was experienced, and then report that emotion. In this manner, qualitatively distinct affects are assessed and there is a differentiated analysis of emotional life. This procedure was used with 32 fourth and fifth graders, the majority of whom reported affects that were achievement-related and negative (the most prominent being characterized by the words angry, unhappy, anxious, and bored). In addition, the emotional reports did not interact with such demographic variables as sex or ability. Reasons why the affective experiences in the classrooms involved in this study (and in other studies) are primarily negative are explored and suggestions for further research are offered. (Author/JN)

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# Affective Experience in a Classroom

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Affective Experiences in a Classroom


## ABSTRACT

Video and auditory recordings were made of individual children during a math class. Immediately after, the recordings were replayed to each child. The children were instructed to report all feelings that were experienced. The vast majority of the reported affects were achievement-related and were negative, with the most prominent angry, unhappy, anxious and bored. The emotional reports did not interact with demographic variables such as gender or ability. The advantages of this novel methodology were discussed.

Parents and educators share a concern about affective experience in the classroom. Given the thousands of hours that children spend in classroom settings, it is essential for the children's home adjustment that school experiences be positive and that the school provide an environment that is perceived positively by the students. Of more immediate pertinence to educators, feelings toward school are likely to influence attendance, attention, "trying", and other motivational indicators that in part determine learning. Many teachers have expressed the belief that negative attitudes are the most serious impediment to school learning (see Epstein, 1981, p. 272).

Both unsystematic and more precise attempts have been made to assess emotional experiences in school. Among the unsystematic efforts are typical parental inquiries such as: "How did you like school today?", followed by typical abbreviated responses such as: "It was fun" (or OK, or bad). More systematic approaches invariably make use of attitude measures which are presumed to be indexes of affect. For example, the "Quality of Student Life" questionnaire (see Epstein, 1981) measures general satisfaction and dissatisfaction toward school, and includes items such as: "Teachers have a way with students that makes me like them" (followed by the alternatives of "true" or "false").

The measurement procedures of the research psychologists as well as of the parents suffer from a number of shortcomings. Both rely on a composite response that supposedly summarizes a number

of component experiences. These experiences may involve any number of qualitatively distinct positive and negative feelings, such as pride, excitement and gratitude, or shame, boredom, and anger. Thus, reported satisfaction with school might reflect pride in accomplishment (an achievement concern) or joy over new friendships (an affiliative concern). In a similar manner, dissatisfaction could indicate either boredom or anxiety, although these affects are associated with disparate classroom environments (Czikszentmihayli, 1979). In addition to this lack of differentiation, because the verbal report is retrospective, it is subject to distortion caused by prior or intervening events that influence retention. Finally, attitudes involve a number of processes such as assimilation, contrast, and information filtering, and are not equivalent to an immediate assessment of emotional experience.

The study to be reported here introduces a novel methodology for the study of affective experience in the classroom. The general procedure is to have auditory and visual recordings of a particular child during a normal classroom period. That child is then immediately taken from the class and placed in a private room where the recordings are replayed. The pupil is instructed to relive the situation, stop the tape anytime that a feeling was experienced, and then report that emotion. In this manner, qualitatively distinct affects are assessed and there is a differentiated analysis of emotional life. In addition, problems of memory distortion are minimized. As also should be noted,

affective experience rather than attitudes are the subject of study. While this method is not without faults (as will be discussed later), it may represent some progress in the attempt to develop an "X-ray" of affective experience.

## Method

### Subjects

Thirty-two fourth and fifth graders participated in the study. Their ages ranged from 9 yrs. 7 mos. to 11 yrs. 10 mos., with a mean age of 10 yrs. 7 mos. Thirteen of the subjects were female, 19 male. All the subjects were enrolled in one of two fourth/fifth grade split classrooms in the same urban, midwestern elementary school. The subjects tended to be of middle-class families, representing a variety of racial/ethnic origins, and had no known cognitive or perceptual problems. One classroom teacher was male; the other, female.

### Procedure

Before beginning the data collection, the students in each classroom were informed by their teacher about the research project. They were told that the investigators were interested in knowing "what kinds of thoughts and feelings kids their age have in school." It was explained that if they chose to participate in the project, they would be videotaped during math class and would then get to see themselves "on T.V.". All students volunteered to participate.

Each subject was taped for approximately twenty minutes during math class. The video equipment was set up before the children entered the room. This was possible because in one classroom math was scheduled first thing in the morning, while in the other group math directly followed the lunch period. One subject was taped and interviewed during each class meeting. The interviewer first informed the student that s/he would be taped that day. Then a microphone was placed on or near the subject's desk. Subjects were instructed to move around as usual while being taped, and were assured that the investigators would still be able to film them. Two experimenters were involved in the procedure; both were familiar and trusted figures in the classroom, having conducted other projects on previous occasions.

The instructions concerning freedom of movement were particularly important, given the nature of math instruction in the two classrooms. In both classrooms, children worked from a variety of math texts ranging from the fourth to the eighth grade level. Assignments were made on an individual basis by the teacher for each child. Children worked on math at their desks, and signed up on the blackboard if they wanted or needed to confer with the teacher. Reasons to sign up primarily involved work completion or difficulties with the assignment. When a subject was called by the teacher, every attempt was made to keep the child on camera. Also, the microphone was moved to the teacher's desk.[1]

After the videotaping was completed, the equipment necessary to play back the tape was transported to a room adjoining the classroom. This process required about five minutes, after which

the subject was asked to view the tape. The subject was again informed that the interviewer was interested in what feelings were experienced during the time of the tape recordings. It was emphasized that the subject should report any and all feelings, and that whatever was said would remain confidential. The recall interview was audiotaped.

The interviewer explained that the entire tape would be viewed, and that the subject should stop the tape whenever a feeling was remembered. The subject was then shown how to operate the pause button and was allowed practice time to become comfortable with the procedure. Pilot research suggested that permitting the subject to control the stopping of the tape was less inhibiting than asking the interviewer to perform this task. Each time the tape was stopped, the subjects were encouraged to express their feelings. If a subject had difficulty in labeling the feelings, the interviewer used reflective listening techniques to aid verbalization. In addition, at each pause the child was encouraged to provide a reason for the expressed affect. Probes varied, depending on the degree of assistance that was required.

## Results

The average number of affective reports was $\bar{X} = 17.73$ (S.D. = 11.28). Of these, 63% were achievement-related ("I felt mad when I could not do the problem."), 17% were linked with affiliative concerns ("I was afraid I would lose her friendship."), 8% had elements of both achievement and affiliation ("I was mad at my friend because she was doing a different problem."), and 12% were

unrelated to either achievement or affiliative classroom occurrences ("I felt terrible because my legs hurt.").

The affects were dichotomized as negative or positive and associated with the unambiguous achievement or affiliation classification (see Figure 1).

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Insert Figure 1 about here

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For all the subjects but one there was more achievement- than affiliative-related affect ($p < .001$), while among all subjects but five there were more reports of negative than positive affects ($p < .001$). As revealed in Figure 1, negative affects particularly were expressed given achievement-related concerns. These data were not associated with any of the assessed demographic variables, including achievement ranking, age, or gender of the pupils, or the particular teacher.

All the positive and negative affects that had been reported were classified respectively into five or ten categories, with 91% inter-rater agreement. The categories with greater than 3% representation are shown in Table 1. Table 1 indicates that the predominant negative affects were angry (angry, mad, annoyed, fed-up), unhappy (unhappy, bad, terrible, frustrated), anxious (anxious, afraid, worried, nervous), bored, and dumb (dumb, stupid, slow).[2] The clearly dominant positive affect was happy (happy, good), followed by amused (amused, funny, laughing), hopeful (hopeful, confident), and relieved.

Table 1

Affective Reports

| Negative | % | Positive | % |
|---|---|---|---|
| Angry | 38 | Happy | 61 |
| Unhappy | 20 | Amused | 10 |
| Anxious | 14 | Hopeful | 9 |
| Bored | 10 | Relieved | 6 |
| Dumb | 4 | | |

Table 2 indicates the situational determinants generating these affects for all situations reported more than ten times. Table 2 reveals that anger is preceded by failure or negative behavior by friends; unhappy is associated with lack of understanding, incompletion, and failure; and anxiety also is linked with lack of task completion and a barrier to that completion, as well as with the video methodology.[3] On the other hand, happiness is the result of goal attainment and problem solution, as well as positive interpersonal experiences. Thus, negative affective experiences primarily were linked with perceived task incompletion and failure while postive feelings were tied to task completion and success. The individual affects, and their situational determinants, were not associated with any of the demographic characteristics of the sample.

Table 2

Situational Determinants of Classroom Affect

| Affect | Antecedent |
|---|---|
| Anger (N=125)[1] | Wrong answers (67)<br>Friends were teasing (21)<br>Friends were disturbing (15) |
| Unhappy (88) | Don't know why I am wrong (33)<br>Can't complete my work (19)<br>Wrong answers (16) |
| Anxious (70) | Want to finish (25)<br>Video procedure (25)<br>Math is too difficult (12) |
| Happy (75) | Finished problem (24)<br>Got problem right (19)<br>Fun with friends (11) |

[1] Number of responses

## Discussion

It has been demonstrated that affective experiences in the classroom, particularly those related to achievement strivings, are primarily negative. These affects are predominantly characterized by the words "angry," "unhappy," and "anxious."

The belief in the validity of the present data and in the generality of the results, however, must be tempered for a variety of reasons. The replay methodology, although overcoming a number of shortcomings outlined earlier, has apparent limitations. For example, perhaps general attitudes, evaluations, and/or feelings are not determined by an unweighted sum of component experiences. Rather, affective tone might be regulated by reactions to one or two events of major significance. The importance of the

particular events, which is likely to influence the intensity and duration of individual affective experiences, was not taken into account in the current research. Further, inasmuch as the index of affect was a self-report, it might be invalid because of response withholding or exaggeration, dissimilar meanings given to the same verbal label, and so on. And the children may have been more likely to have a verbal label for the negative, rather than for the positive feelings, so that the self-reports do not reflect actual experience. Prior research has shown that there are more negative than positive labels for achievement-related emotions (Weiner, Russel & Lerman, 1978). Finally, affective reactions were assessed in two particular math classes among 4th and 5th graders. Other pupils studying other subjects in other schools could exhibit a different pattern of data. In sum, caution must be exerted when drawing implications from the present findings.

On the other hand, there are reasons to believe that the results are both valid and general. The data are in accord with other findings indicating that the classroom is perceived as aversive (see Epstein, 1981). Similar findings also were obtained in a study by Prawat (1980) in which teachers were asked to describe affectively significant events occurring in their classrooms. Nearly 80% of the affect attributed to students by teachers was negative, with most falling into a "dislike/anger" category. In addition, in the math classes under study, students spent the majority of their time at their desks, engaged in a subjectively difficult task. Research has documented that in elementary math classes students spend approximately 75% of their

time working independently at their desks (see Denham & Lieberman, 1980; Rosenshine, 1980). Thus, the classrooms under study have some close similarities to other math classrooms.

The question that then remains is: "Why are the affective experiences in these classrooms so negative?" A number of possible answers come to mind. In these particular classrooms, the difficulty of the material was matched with the capabilities of the students. Thus, there were many instances of temporary failure or uncertainty regarding problem solution. Inasmuch as task incompletion was the main determinant of negative affect, unpleasant feelings were often experienced. The tailoring of the task difficulty for each student also might have been responsible for the absence of affective interactions with pupil characteristics such as ability. We anticipated that bright pupils might be more bored than those of lesser ability, while low achieving students might be more prone to experience anxiety. But student-difficulty matching would tend to eliminate these differential reactions.

Another source of negative affect could have been the characteristics of the teaching method. It has been found that students are more involved in classrooms where teachers circulate among students, monitoring their progress (see Denham & Lieberman, 1980). The teachers in the two classrooms under study did not engage in this activity, but rather expected students to sign-up and then wait for help. This might have lead to more frequent experiences of frustration, failure and withdrawal from the task. Classroom variables such as the difficulty of the assignments or

the teaching procedures can, of course, be modified and ought to produce change in classroom affects (but at the risk of having other, negative consequences).

Going beyond the confines of classroom variables, perhaps any activity which is not under volitional control, or is labeled as "work", results in predominantly negative feelings. One wonders what would be the moment-to-moment affective life of a college teacher, or individuals engaged in any constrained activity? If this is the source of negative affect, then classroom affective experiences would benefit from a construal of the activity as play rather than work, and under control of the student.

And extending beyond the general category of "work", perhaps the majority of affective experiences in life are negative. It has been suggested by Freud and others that memories are generous, and thus our construals of the negative past are relatively postive. Clearly, the greater the situational specificity of the unpleasant feelings documented in the present research, the more likely that those reactions can be altered.

The reported study has examined just a very few of the intriguing questions that might have been raised. Are affective reports consistent over time and across situations? That is, are there stable individual differences in affective reactions to school? Are these related to characteristics of the pupil? Do disparate classroom climates, areas of study, teaching philosophies, and/or teacher characteristics give rise to qualitatively distinct affective lives? How would a retrospective global affective report of satisfied or dissatisfied, or general

attitudes toward school, relate to the component affective experinces? A myriad of research questions are amenable to investigation given the methodology that has been advanced. Hence, perhaps the procedure will aid in the study of affective experience, which is an area of research where conceptual thinking has moved beyond methodological sophistication.

## Footnotes

[1]In the experimenter's opinion, the children were not greatly distracted by the taping procedure. Both classrooms had participated in other research projects involving videotaping, and were used to taking part in a wide variety of research projects. However, for a few subjects movement around the room may have been curtailed. In some cases, the children expressed the belief that they should not move around too much or the camera would not be able to follow them.

[2]The categories were in part guided by prior research (Weiner, Russell & Lerman, 1978). Thus, frustration was linked with unhappy because prior research had revealed them both to be "outcome-dependent" affects, i.e., linked with failure, but not with any specific causal attribution.

[3]The video source of negative affect would not be part of a typical classroom. Figure 1 includes only the achievement- and affiliative-related affects, and thus does not include emotions generated by the experimental procedure.

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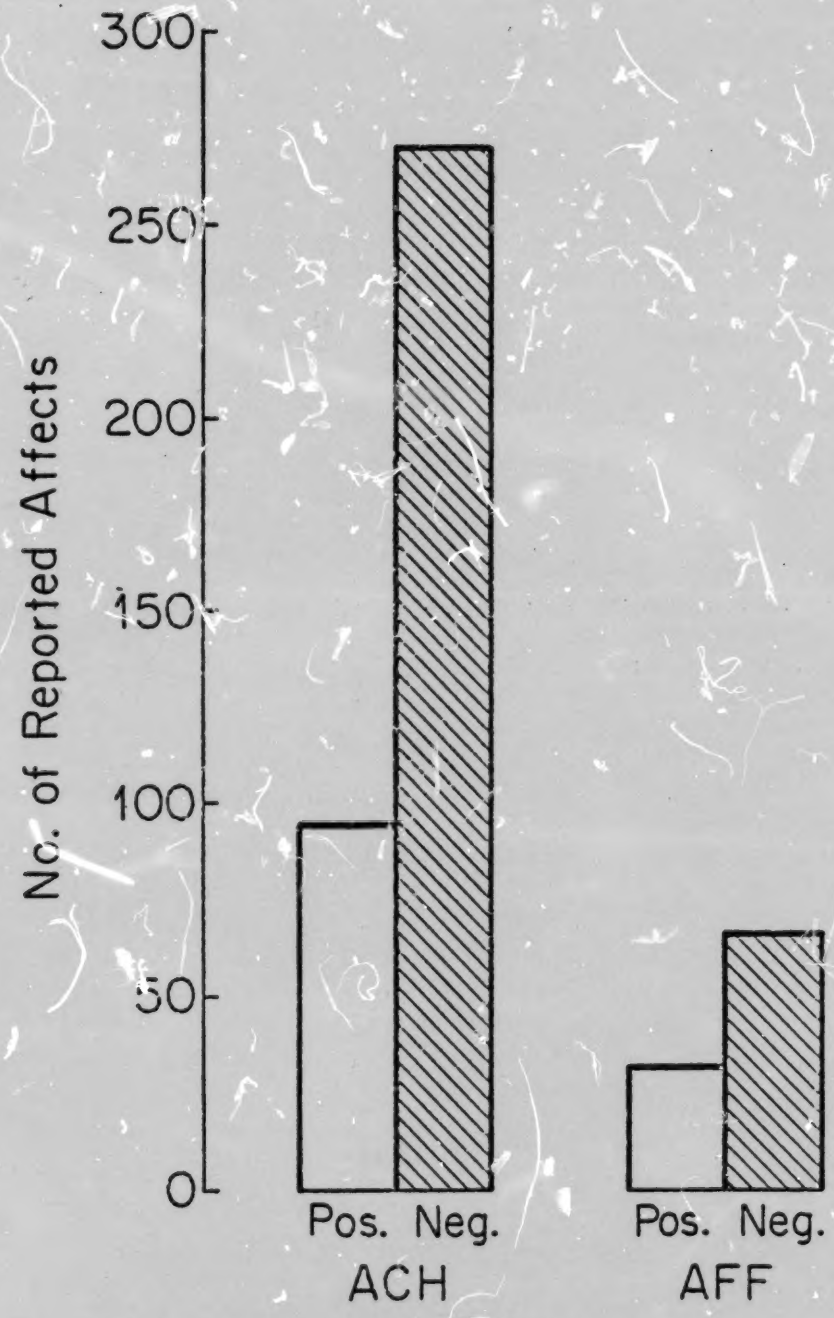


Figure 1. Number of reported affects as a function of the motivational domain (achievement versus affiliation) and direction (positive versus negative) of the affect.